SYNOPSIS OF THE THESIS

KNOWLEDGE MANAGEMENT POLICIES AND PRACTICES – A STUDY WITH REFERENCE TO COMPUTER SOFTWARE AND SERVICES COMPANIES IN KARNATAKA

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INTRODUCTION

Due to the rapid change in globalisation over the past few years, the economy and management strategy have undergone numerous changes. The organization's primary driving force behind this change has been knowledge management. As noted by Drucker (1994) and others, including Evan and Wurster (2000), knowledge has emerged as the key source of competitive advantage for managers, employees, and their organisation in the new economy.

Since managers today recognise the importance of knowledge, it is essential for individual and organisations to have a comprehensive understanding of knowledge management methods if they are to survive in the new knowledge age. "Organizations finally discovered that knowledge is high and significant, that can propel them ahead in the corporate globe, that technology is not alone the important component for their strategy," adds Tiwana (2000).

Knowledge management is concerned with storing and sharing the wisdom, understanding, and expertise accumulated in an organisation about its processes, techniques, and operations. It treats knowledge as a key resource. Hansen et al (1999) remark ‘For hundreds of years, owners of family businesses have passed on their commercial wisdom to children, master craftsmen have painstakingly taught their trades to apprentices, and workers have exchanged ideas and know-how on the job’. But they also comment as the foundation of industrialized economies has shifted from natural resources to intellectual assets, executives have been compelled to examine the knowledge underlying their business and how that knowledge is used.

Dhurana (1999) highlighted this because the survival of the fittest organisation is an outmoded thought in the knowledge-based economy and the ability to survive and thrive comes only from a firm’s ability to acquire process, create, maintain and retain old and new knowledge in the face of uncertainty, complexity, and rapid change. The knowledge-based economy is true, a new economy. The information technology sector in India is in the mature-growth stage, hence challenges are coming in different ways. Today knowledge management is not alien to any information technology company and they are practicing the same without really calling its name as such.

In a knowledge-based global economy, companies will have to come to terms with the ground realities as markets shift, uncertainty dominates, technologies proliferate, competitors multiply, customer preferences change in an unprecedented manner, and products and services become obsolete faster than ever before. Successful organisations increasingly focus on product innovation, cost containment, competitive pricing, creative advertising, financial prudence, rapid response to market intelligence information, attracting and retaining a talented workforce, building and sustaining, corporate reputation, more efficient and effective supply chain management, highly innovative customer relationship management, and successfully meeting corporate social and environmental responsibilities.

Knowledge management (KM) is an old concept but a new term. The concept of coding and transmitting knowledge in organisations is also not new because training and development programmes, organisational policies, routines, procedures, reports, and manuals have served this function for years. Nevertheless, what is new and exciting in the KM field is the potential to use modern information and communication technologies (e. g., the internet, intranets, browsers, data warehouses, data filters, and software agents) to systematise, facilitate and expedite company-wide KM. It relates to unlocking and leveraging the knowledge of individuals so that this knowledge becomes available as an independent organisational resource. KM is, therefore, introduced to help companies create, share and use knowledge effectively and efficiently (Davenport, Long, and beers, 1998).

It is now almost axiomatic that the strategic goal of modern industrial organisations is to create more intelligent and flexible firms than their competitors by hiring and developing more talented human resources and by extending their knowledge and skill base. The new economic and business environment characterized by worldwide competition has influenced the Indian corporate sector in three profound ways. First, progressive organisations must achieve a higher standard of productivity, quality, and effectiveness in order to survive, grow and excel in the new environment. Second, companies must adapt or change their business strategies to take into account the new realities of intense global and domestic competition. Finally, corporate cultures, many of which were formed in the regulated or monopolistic environment during the pre-liberalization era (e.g., the Indian public sector), must be retooled for the challenges

of the competitive environment. It is imperative in the context of new business realities that organisations should be able to continuously innovative, be customer-focused, and remain cost-competitive in order to stay successfully in the field of business. Within this background, knowledge management (KM) is recognised and valued by most successful organisations as powerful competitive tool.

CONCEPTUAL FRAMEWORK

In this section, an attempt is made to briefly explain the key concepts related to the present area of research such as, concept of knowledge, definitions of knowledge, types of knowledge, evolution of knowledge management, concept of knowledge management, Knowledge management Definitions**,** Components of Knowledge management, Knowledge Economy, KM Life-cycle, KM process, role of technology in knowledge management, KM metrics, Theory of planned behaviour and determinants of knowledge sharing behaviour.

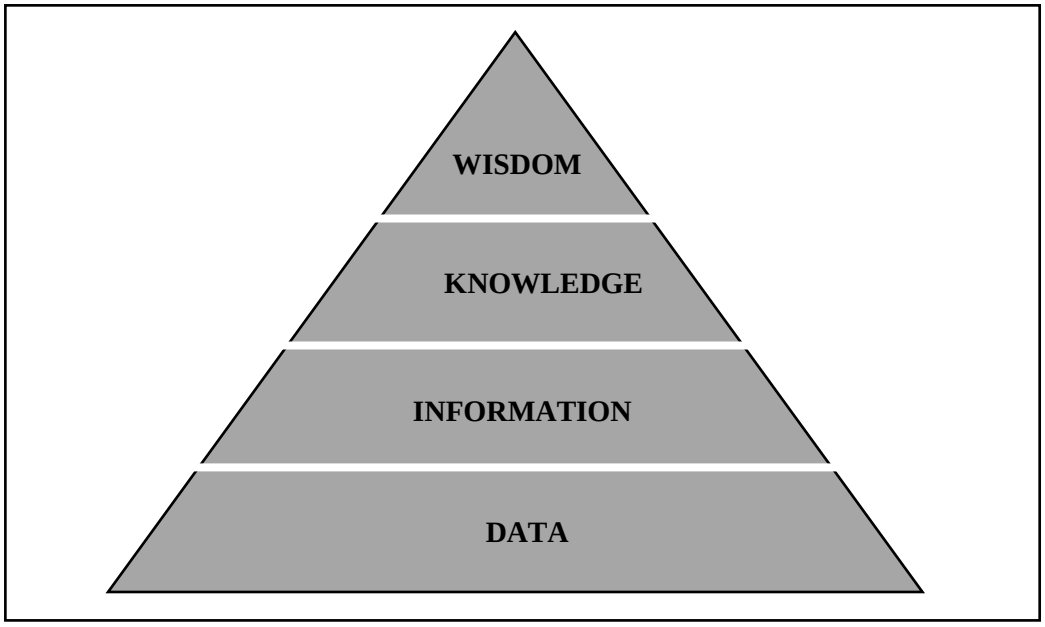
CONCEPT OF KNOWLEDGE

The traditional knowledge pyramid uses the following summarized basic definitions:

- **Data:** Basic, discrete, objective facts such as who, what, when, where, about something.
- **Information:** Data that is related to each other through a context such that it provides a useful story, as an example, the linking of who, what, when, where data to describe a specific person at a specific time.
- **Knowledge:** Information that has been culturally understood such that it explains the how and the why about something or provides insight and understanding into something.
- **Wisdom:** Placing knowledge into a framework or nomological net that allows the knowledge to be applied to different and not necessarily intuitive situations.

These definitions imply that there is a, knowledge, and wisdom, and it is the knowledge pyramid that provides a graphical representation of these relationships as a rollup hierarchy of data leading to information leading to knowledge, and, finally, leading to wisdom (henceforth, this will be referred to as the DIKW creation flow). Figure 1.1 presents a knowledge pyramid.

Figure 1.1: The knowledge pyramid



Source: Ackoff, 1989

DEFINITIONS OF KNOWLEDGE

Organisational scholars still argue that knowledge is a multifaceted concept with multi-layered meanings for different circumstances and for different people. Knowledge as the set of justified beliefs that enhance an entity's capability to take effective action (Alavi & Leidner, 2001; Nonaka, 1994).

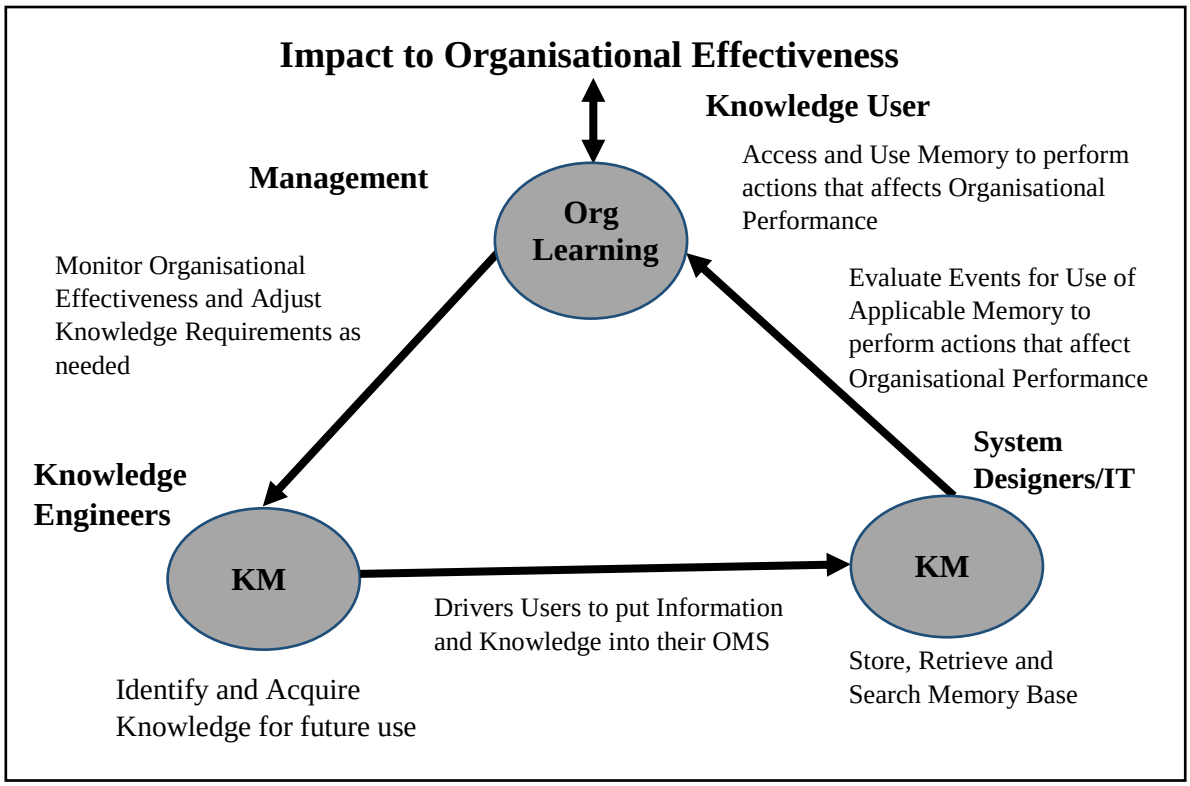
According to Drucker (1993), Knowledge is not impersonal, like money. Knowledge does not reside in a book, a databank, a software programme; they contain only information. Knowledge is always embodied in a person; carried by a person; created, augmented, or improved by a person; applied by a person; taught by a person, and passed on by a person.

According to Davenport and Prusak (1998), Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates in the minds of knowers. In organisations, it often becomes embedded not only in documents or repositories but also in organisational routines, processes, practices, and norms. Table 1.1 presents a summary of the different definitions of knowledge.

CONCEPT OF KNOWLEDGE MANAGEMENT

Knowledge Management is better understood when the concepts of organisational memory (OM) and organisational learning (OL) are incorporated. Jennex and Olfman (2002) found that the three areas are related and have an impact on organisational effectiveness. Organisational effectiveness is how well the organisation does those activities critical to making the organisation competitive. OL is the process the organisation uses to learn how to do these activities better. OL results when users utilize knowledge. That OL may not always have a positive effect is examined by the monitoring of organisational effectiveness. Effectiveness can improve, get worse, or remain the same. How effectiveness changes influences the feedback provided to the organisation using the knowledge. KM and OM are the processes used to identify and capture critical knowledge. Knowledge workers and their organisations 'do' KM; they identify key knowledge artifacts for retention and establish processes for capturing it. OM is what IT support organisations 'do'; they provide the infrastructure and support for storing, searching, and retrieving knowledge artifacts. Figure 1.2 presents a concept of knowledge management.

Figure 1.2: Concept of Knowledge Management


Impact to Organisational Effectiveness
Knowledge User
Access and Use Memory to perform actions that affects Organisational Performance
Management
Org Learning
Monitor Organisational Effectiveness and Adjust Knowledge Requirements as needed
Evaluate Events for Use of Applicable Memory to perform actions that affect Organisational Performance
System Designers/IT
Knowledge Engineers
KM
KM
Drivers Users to put Information and Knowledge into their OMS
Identify and Acquire Knowledge for future use
Store, Retrieve and Search Memory Base

Source: Jennex & Olfman, (2002, p.8).

KNOWLEDGE MANAGEMENT DEFINITIONS

In a 1986 keynote address to a European management conference, the phrase "knowledge management" was first used. Since then, different definitions that better reflect the complexity of knowledge management have been put forth. Knowledge management is defined by the American Productivity and Quality Center as "the strategies and processes of identifying, capturing, and leveraging knowledge" (Atefeh et al., 1999). "The art of transforming information and intellectual assets into enduring value for an organization's clients and its people," according to Knapp (1998), is the definition of knowledge management.

Davenport and Prusak (1998) defined knowledge management as the management of a corporation's knowledge through a systematic and organisational specified process for acquiring, organising, sustaining, applying, sharing, and renewing both tacit and explicit knowledge from employees to improve organisational performance and to create value.

Wiig (1994) suggested that knowledge management in an organisation must be considered from three perspectives, each with different scopes and purposes: (a) a business perspective - focusing on why, where, and to what extent the organisation must invest in or exploit knowledge, and which strategies, products and services, alliances, acquisitions, or divestments should be considered from a knowledge-related point of view; (b) a management perspective - focusing on determining, organizing, directing, and monitoring knowledge-related activities required to achieve the desired business strategies and objectives; and (c) a hands-on operational perspective - focusing on applying the professional skill to conduct explicit knowledge-related work and tasks.

In fact, knowledge management is a principle that is aimed at satisfying and exceeding the customer's expectations (Keskin, 2005). Table 1.2 presents a summary of the different definitions of knowledge management.

KNOWLEDGE MANAGEMENT PROCESS

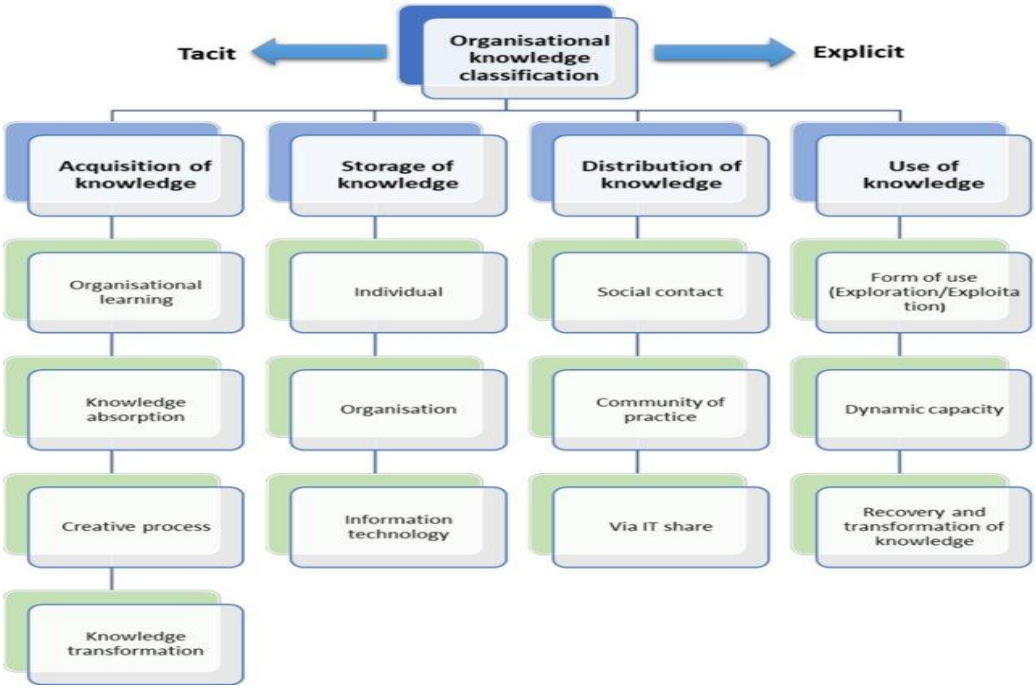
Many researchers and practitioners have explored the concept further, and thus, knowledge management became an umbrella term encompassing multiple knowledge management processes including:

- the creation of new knowledge (Knowledge Creation),

- the storage of knowledge (Knowledge Storage),
- the transfer or dissemination of knowledge (Knowledge Sharing),
- the use of knowledge (Knowledge Application)

Each Knowledge process address specific organisational needs and each carries varying amount of investments, activities and difficulties. These changes reflect the state of affairs of knowledge management domain- both in practice and conceptually. While the concept of Knowledge management in its current state is relatively more mature compared to its inception days, there are still a number of problems and challenges that organisations face with respect to leveraging knowledge they have effectively. Figure 1.5 presents a process of knowledge management of Alavi and Leidner (2001).

Figure 1.5. The Process of Knowledge Management of Alavi and Leidner (2001)



Source: Dr Jones, A., & Shideh, R. (2020). The Significance of Knowledge Management in the Knowledge Economy of the 21st Century, International Journal of Innovation, Creativity and Change. http://www.ijicc.net, 13(3).

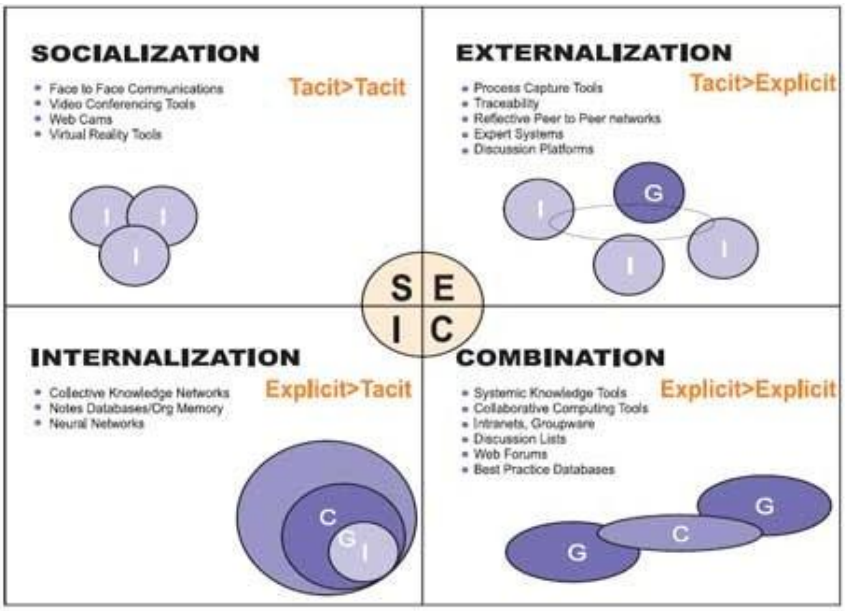
Knowledge Creation

Knowledge creation requires the existence of a person or group of people who come up with new ideas, new concepts, innovative products or processes, etc. Through research, innovative projects, experiments, observations, etc., knowledge creation

can be accomplished. Firestone (2003) suggests that knowledge production begins with the request of knowledge, followed by individual or group learning, information acquisition, application for evaluation of knowledge, and ultimately, building organizational knowledge. According to Nonaka (1994), organizational knowledge creation and conversion are based on two dimensions. The first dimension demonstrates that knowledge is exclusively created by humans. The interaction between explicit knowledge and tacit knowledge is the focus of the second dimension. These two dimensions form the basis for defining the four processes of creation / conversion of knowledge - socialization, externalization, combination and internalization. Figure 1.6 presents a four modes of knowledge creation.

- Socialization - tacit knowledge is converted into tacit knowledge during discussions, meetings, etc.
- Externalization - tacit knowledge is converted into explicit knowledge and outlined in documents, manuals, etc.
- Combination - explicit knowledge are converted into another form of explicit knowledge
- Internalization - explicit knowledge is converted into tacit knowledge by individuals.

Figure 1.6: The four modes of knowledge creation



Source: Nonaka, I. (1994). A dynamic theory of organisational knowledge creation. Organisation Science, 5(1), 14–37

The four ways decide an endless spiral of knowledge conversion. This continuous and dynamic process is rooted in people's behaviour, the main agents that create knowledge. For example, when people try to combine explicit knowledge (this happens, for example, when someone uses mathematical formulas and physics to solve a complicated problem) they can at the same time, to discuss with their colleagues as exchanging tacit knowledge with them. Instead, they can visit different forums to find solutions, the forum will have to outsource or to explain the problem, seeking help. Nonaka consider a model consisting of five phases for the creation of organisational knowledge.

Knowledge Storage

Knowledge Management is a systematic process of creating, storing, sharing and applying knowledge effective for making strategic decisions. Hence knowledge storage is a critical process of KM where knowledge is stored in the form of repositories such as documents, databases and reports. Human memory also acts as a repository but such knowledge is lost when employees leave the organisations. So in order to preserve knowledge, it has to stored, and transferred to other people in the organisations. Stored knowledge often called organisational memory includes knowledge that employees recall as well as knowledge embedded in the organisation’s systems and structures. One way of retaining knowledge is to retain the employees, but it is often found to be less practical in certain circumstances. Apprenticeship training with skilled employees can prevent such knowledge loss to a certain extent. But otherwise, it is important to have a knowledge repository where knowledge is systematically documented.

Knowledge Sharing

The people who actually create, share, and use the knowledge within an organisation have a significant impact on its ability to properly utilize that knowledge. Only when people can share and build on one another's expertise can knowledge be effectively leveraged. Making knowledge available to others inside the organisation is essentially what knowledge sharing entails.

The process through which knowledge held by an individual is transformed into a form that can be understood, absorbed, and utilised by other individuals is known as

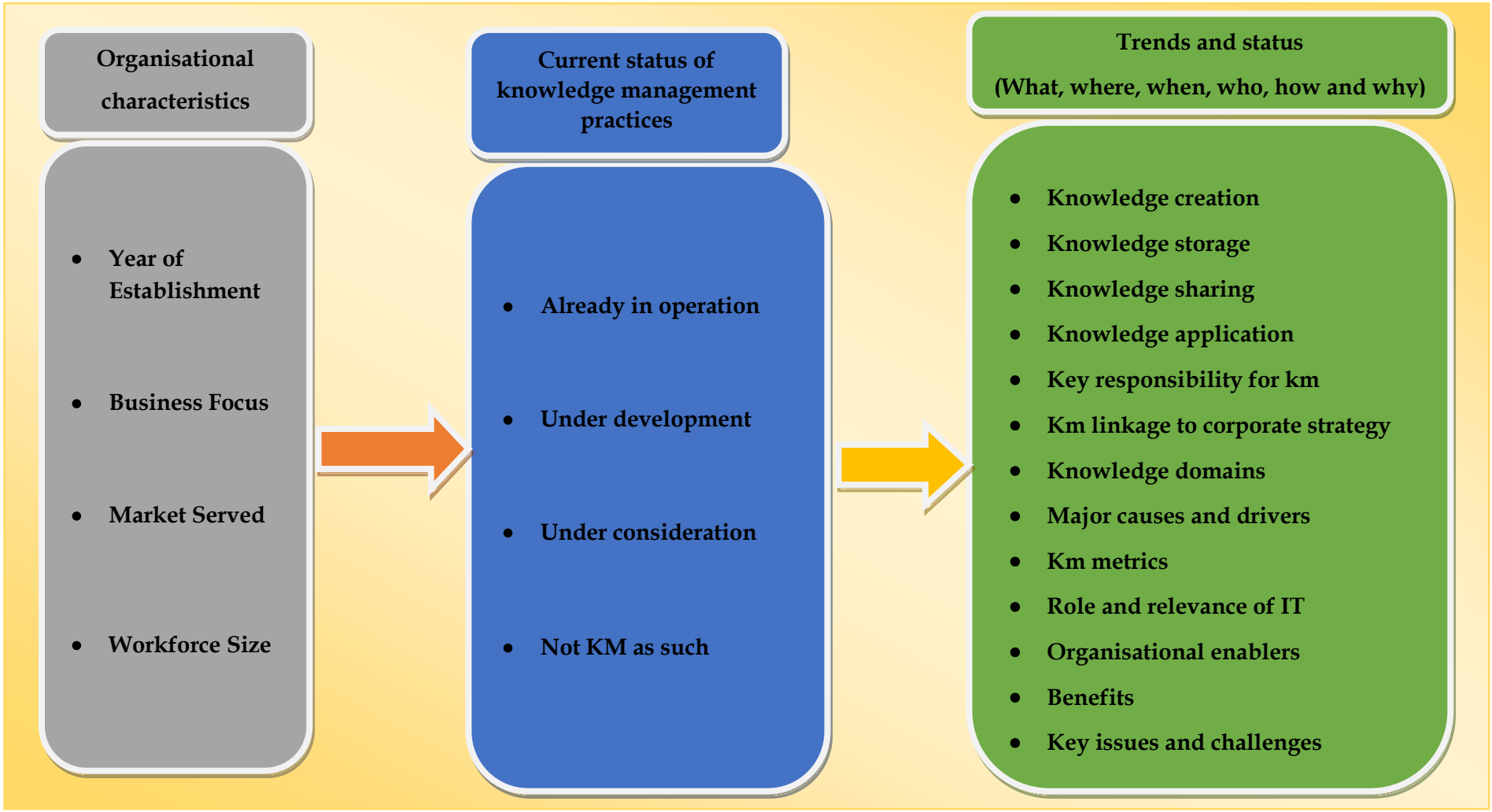
knowledge sharing. The term "sharing" indicates that the act of putting one's information into a format that can be utilised by others requires some deliberate action on the side of the knowledge-holder. Furthermore, sharing implies that the sender retains ownership of the knowledge; as a result, the sender and the recipient share ownership of the knowledge. Davenport (1997) distinguished sharing from reporting by defining it as a voluntary action. The exchange of information based on established procedures or formats is referred to as reporting. On the other hand, sharing denotes a deliberate action on the part of a person who takes part in the knowledge exchange despite being under no obligation to do so. According to Hendriks (1999), knowledge sharing necessitates a connection between at least two parties—one who has the knowledge and the other who acquires it.

Knowledge Application

Utilization and application are the ultimate goals of knowledge, and when knowledge is put into practise, these goals are achieved. Application of knowledge leads to knowledge growth and expertise in a field of action, and through consistent use, the user develops into an expert. People actively interpret knowledge in order to make it fit with their unique circumstances and viewpoints rather than simply passively taking it in.

Following knowledge sharing in the knowledge management cycle, knowledge application is the obvious next step (Dalkir, 2005). Sharing or distributing knowledge to a receiving portion is insufficient. Instead, the respondents must employ the questioned strategies, practises, and approaches in a way that modifies their behaviour. When one individual's or one group's experience affects another group's behaviour, that is when knowledge is applied. The idea of knowledge application measures how much knowledge obtained from other units or from disciplinary communities has been applied in a useful way within the workers' unit.

Figure 1.7 Knowledge management policies and practices: Trends and status



Source: Developed by the researcher based on earlier studies

THEORY OF PLANNED BEHAVIOUR (TPB)

The most prominent and well-known social-psychological model for explaining and predicting human behaviour in particular settings is the theory of planned behaviour (TPB) of Ajzen (1991). The Theory of Reasoned Action (TRA) that the researcher first developed is expanded upon in TPB (Ajzen and Fishbein, 1980). The extension came about as a result of the finding that the behaviour did not appear to be entirely voluntary and under control. As a result, perceived behavioural control was included as a new determinant. The theory was given the label "the theory of planned behaviour" with this introduction.

According to TPB, the primary determinants of an individual's behavioural action are intention and perceived behavioural control. Intention is an indication of individual's readiness to engage in a behaviour. Intention in turn is a function of individual's attitude towards a behaviour, subjective norm and perceived behavioural control with each determinant weighted for its significance in relation to the behaviour and population in question. Attitude towards a behaviour is based on behavioural beliefs. Behavioural beliefs are beliefs about the expected consequences of a specified behaviour and the favourable or unfavourable evaluation of these consequences. Subjective norm is based on normative beliefs. Normative beliefs are beliefs about the perceived social pressure from important referent group to perform or not to perform a specified behaviour. Normative beliefs together with the motivation to comply with these referent group expectations determine subjective norm. Perceived behavioural control is based on control beliefs. Control beliefs are beliefs about the perceived presence or absence of factors that may facilitate or impede the performance of behaviour in interest. Control beliefs together with the perceived power of each factor determine perceived behavioural control. Perceived behavioural control boosts intention because individuals are not motivated to undertake tasks at which they fail. Additionally, Perceived behavioural control is also expected to influence actual behaviour, especially, when there is an agreement between individual's perceptions of behaviour control and the actual control.

This research adopts the theory of planned behaviour (TPB) as theoretical basis for explaining and predicting the motivational influences of individual knowledge sharing behaviour. TPB is chosen over TRA because TPB has occasionally explained the

actual behaviour better than TRA. For example, Rivis and Sheeran (2003) observe that intentions typically account for 19 to 38 per cent variance in actual behaviour (Ajzen, 1991; Armitage & Conner, 2001; Sheeran & Orbell, 1998) with attitude and subjective norm explaining between 33 to 50 per cent variance in intention (Ajzen, 1991; Armitage & Conner, 2001; Sheeran & Taylor, 1997).

The second section of the thesis examines the determinants, moderators and extent impact of various factors on knowledge sharing intention and actual knowledge sharing behaviour by using a modified version of the TPB model (Figure 1.13). TPB model is modified by adding four mediating variables gender, age, education and qualification. Table 1.4 provides a conceptual definitions of knowledge sharing behaviour.

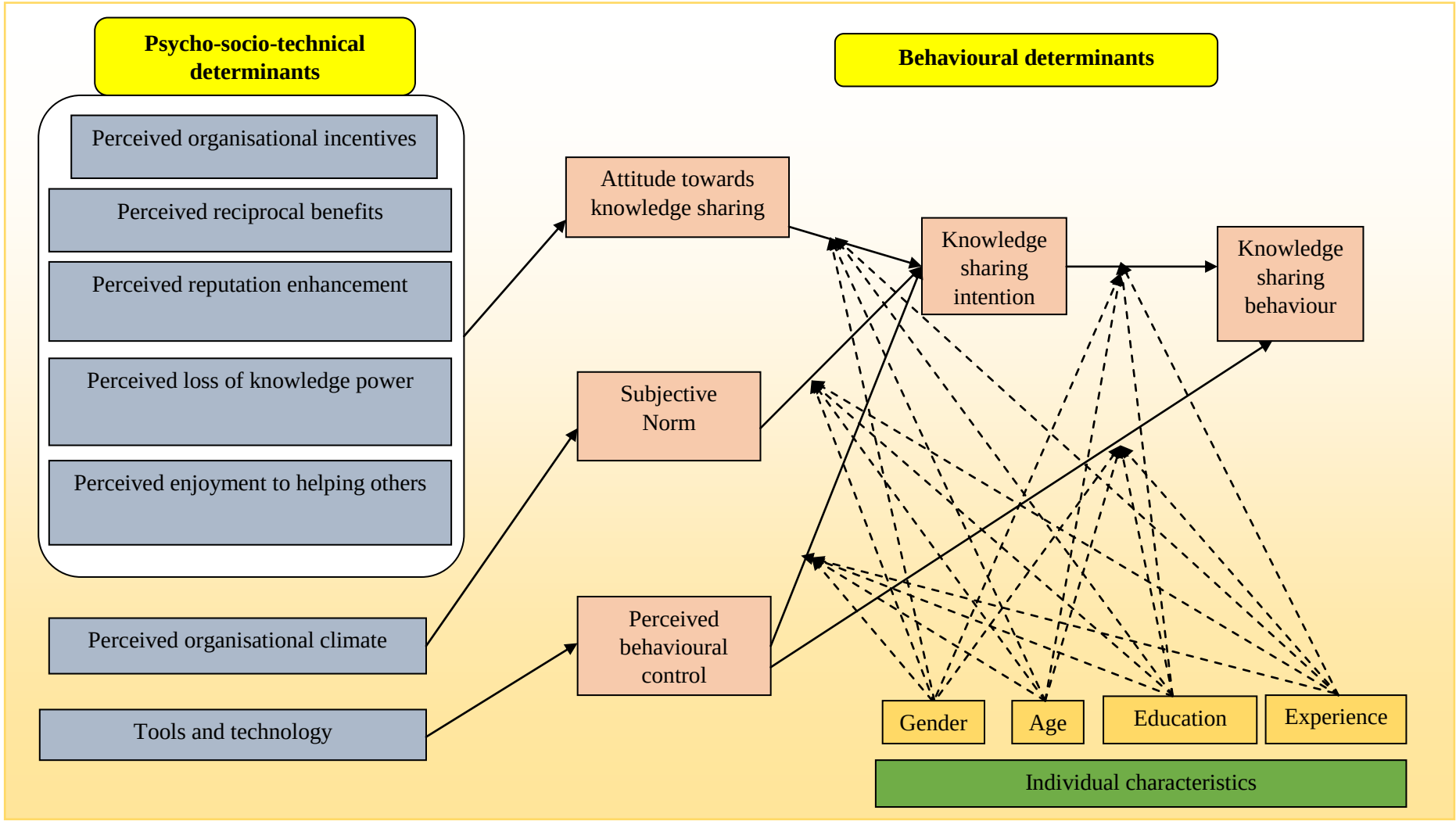
Table 1.4: Key factors of determinants of knowledge sharing behaviour: Conceptual definitions

Sl. No.	Key factors	Conceptual definition
1.	Attitude toward knowledge sharing	"An individual's positive or negative feelings (evaluative affect) about performing the target behaviour" (Fishbein and Ajzen, 1975, p 216).
2.	Subjective Norm	"The person's perception that most people who are important to him think he should or should not perform the behaviour in question" (Fishbein and Ajzen, 1975, p 302).
3.	Perceived behavioural control	"The perceived ease or difficulty of performing the behaviour" (Ajzen, 1991, p 188). In the context of information systems research, "Perceptions of internal and external constraints on behaviour" (Taylor and Todd, 1995c, p 149).
4.	Knowledge sharing intention	Motivation about actual knowledge, formal document, know-how, and expert knowledge (Bock GW, Zmud RW, Kim YG, et al. 2005).
5.	Knowledge sharing behaviour	Action to share knowledge and actually use knowledge (Bock GW, Zmud RW, Kim YG, et al. 2005).

6.	Perceived organisational incentives	Perception to obtain a better work assignment, promotion, and many education chances (Kankanhalli et al., 2005) (Bock GW, Zmud RW, Kim YG, et al. 2005).
7.	Perceived reciprocal benefits	Perception to respond for my knowledge needs, the emergency situation, and mutual intimacies (Kankanhalli et al., 2005) Wasko MM, Faraj S. 2005).
8.	Perceived reputation enhancement	Perception of increase in reputation due to sharing knowledge. (Kankanhalli et al., 2005)
9.	Perceived loss of knowledge power	The perception of power and unique value lost due to knowledge (Kankanhalli et al., 2005).
10.	Perceived enjoyment in helping others	The perception of pleasure obtained from helping others through knowledge (Wasko & Faraj, 2000).
11.	Affiliation	"The perception of as sense of togetherness among an organisation's members, reflects the caring and pro-social behaviour critical to inducing an organisation's members to help one another" (Bock et al., 2005, p.94), Chay, Loh, Menkhoff and Evers (2005).
12.	Innovativeness	The perception that change and creativity are encouraged, including risk-taking in new areas where one has little or no prior experience (Bock et al., 2005, p.94).
13.	Fairness	The perception that organisational practices are equitable and non-arbitrary or capricious (Bock et al., 2005, p.94).
14.	Tools and technology	The set of items for measuring the performance of employees for availability and ease of use. (Chennamaneni A, James T.C. Teng b & M.K. Raja, 2013).

Source: Various source as indicated in parentheses.

Figure 1.8: Determinants of knowledge sharing intention and actual behaviour of knowledge sharing



Source: Developed by the researcher based on Theory of Planned Behaviour model (Ajzen, 1991)

SUMMARY OF LITERATURE REVIEW AND RESERCH GAP

Based on the foregoing analysis of review of literature, it is very clear that previous research studies pertaining to the knowledge management and process related could be classified into two broad categories: (a) trends and status of knowledge management and (b) determinants of knowledge sharing behaviour. As far as the trends and status of knowledge management are concerned, out of 129 research studies reviewed, 96 studies (74%) were conducted outside India while the remaining 33 studies (26%) were conducted within India carried out during 1994 to 2017. These reviews were mainly based on the research publications appeared in refereed journals such as Chartered Institute of Personnel Development, International Journal of Training and Development, Impact: Applied Research in Workplace knowledge management, Human Resource Development International, and Electronic Journal of knowledge management for the reference period (1994-2017).

With reference to the review of literature about the key determinants of knowledge sharing behaviour context of knowledge management, out of 59 research studies, 55 studies (93.22%) were conducted outside India while the remaining 4 studies (6.78%) were conducted within India carried out during 2005 to 2016 used theoretical models such as Theory of Reasoned Action (TRA), Social Exchange Theory and other models. And out of 32 research studies, 30 studies (93.75%) were conducted outside India while the remaining 2 studies (6.25%) were conducted within India carried out during 2003 to 2020 using Theory of Planned Behaviour (TPB).

It is to be noted that these empirical studies were conducted in the foreign context such as Taiwan, Tunisia, Korea, China, the UK, and the USA. The major sources of review of these empirical studies were research articles, published in refereed journals such as Computers and Education, International Journal of Training and Development, Information and Management, Communication of the IBMA, Behaviour and Information Technology, Online Information Review, and International Journal on knowledge management, International Journal of Business and Management, Journal of Knowledge Management, American Journal of Economics and Business Administration, and Journal of Management Information Systems.

Compared to other theoretical models examining technology acceptance and share behaviour in the context of corporate knowledge management, most of the previous researchers relied on the theory of planned behaviour model. Accordingly, the present research study also used Theory of Planned Behaviour model for identifying and discussing the major determinants of knowledge management technology acceptance and share behaviour with suitable modification.

STATEMENT OF THE RESEARCH PROBLEM AND RESEARCH QUESTIONS

Knowledge management (KM) is emerging as a key management responsibility and consequently organisations are investing significant resources in information technology (IT) to support the creation, storage, sharing, and application of knowledge. KM plays a critical role in information systems (IS) development and maintenance in organisations. Prior research demonstrates that higher levels of shared knowledge between IS groups and their "line customers" result in improved IS performance (Nelson & Cooprider, 1996). KM is particularly important for software consulting companies that can apply knowledge acquired in prior projects in the execution of subsequent projects. Software development companies can organise and exploit prior experience to facilitate learning at an individual and organisational level (Conradi, 2000).

Siemens linked their knowledge core competencies to organisational objectives and core products. They focused on developing knowledge through R&D using groupware to transform the knowledge into action (Lloyd, 1996). Companies often characterized as agile companies (Goldman et al., 1994) use the knowledge based next generation manufacturing model to develop products that can easily be customized to the individual requirements of customers.

KM is more relevant to enterprises that are operating in knowledge intensive areas Consulting firms are the ultimate example of organisations selling knowledge directly. However, there are certain indicators for an organisation s ability to create, disseminate and apply knowledge. Demarest (1997) identified six key questions an organisation has to answer to participate in KM effectively. In summary, they relate to: 1. the culture, actions and beliefs of managers about the value, purpose and role of knowledge; 2. the creation, dissemination and use of knowledge within the firm; 3.

the kind of strategic and commercial benefits a firm can expect by the use of effective KM; 4. the maturity of knowledge systems in the firm; 5. how a firm should organize for KM; and 6. the role of information technology in the KM programme.

Knowledge sharing has been recognized as a positive force for the survival of an organisation. Yet, the factors that promote or discourage knowledge sharing behaviours in the organisational context are poorly understood (Bock et al., 2005; Connelly and Kelloway, 2003; Ruggles, 1998). Identification of factors that motivate employees to share knowledge for the benefit of other employees and the firm is regarded as a high priority issue for organisations (Hall, 2001; Smith and Farquhar, 2000; Prusak, 1999; Boisot and Griffiths, 1999). Even much less empirical research exists on the deeper individual issues that shape individuals beliefs, attitudes, intentions, and behaviours in knowledge sharing (Andrews & Delahaye 2000; Hinds & Pfeffer 2003). The studies of Bock et al., 2005 and Ryu et al., 2003 show some encouraging developments. However, even these studies did not measure explicitly employee's actual knowledge sharing behaviour. Citing the growing significance of knowledge sharing to the success of knowledge management and to organisational survival, several researchers have called for further investigation of the factors that shape knowledge sharing behaviours in the organisational context.

In the light of the review of existing literature, it was found that the available studies were largely conceptual and descriptive in nature, with anecdotal practitioner-oriented findings. Previous researchers in this field observed that the current domain lacked a holistic theoretical framework and conclusive empirical evidences. Within this background, the present study titled ― KNOWLEDGE MANAGEMENT POLICIES AND PRACTICES – A STUDY WITH REFERENCE TO COMPUTER SOFTWARE AND SERVICES COMPANIES IN KARNATAKA, intended to throw fresh light on trends and status of knowledge management and determinants of Knowledge sharing behaviour, which is an under-researched area. In the fitness of things, the present research study intended to answer the following research questions:

RQ 1: What are the broad trends and status of knowledge management policies and practices in computer software and services companies in Karnataka?

RQ 2: What are the major motivational factors influencing the employees for 'intention to share' knowledge and actual knowledge sharing behaviour in respect of computer software and services companies in Karnataka?

RQ 3: Do employees characteristics moderate the relationship between the various factors of perception on 'intention to share' knowledge and actual knowledge sharing behaviour?

OBJECTIVES OF THE STUDY

The central purpose of this research study is to examine and report on the Knowledge Management Policies and Practices – A Study With Reference to Computer Software and Services Companies in Karnataka along with the identification of key determinants of Knowledge sharing, and the extent of impact of certain factors on the behavioural intention to use and the actual usage behaviour of the employees. However, the translation of three research questions results in the following five specific objectives:

(1). to highlight and discuss the broad trends and status of knowledge management policies and practices;

(2). to analyse and interpret the views and perceptions of HRD/IT managers about the key responsibility for knowledge management, knowledge management linkage to corporate strategy, knowledge domains, major causes and drivers, knowledge management metrics, role and relevance of IT, organisational enablers, knowledge creation, storage, sharing and application, benefit of KM, key issues and challenges of knowledge management in their respective organisations;

(3). to determine the major motivational factors influencing the employee's for intention to share knowledge and actual 'knowledge sharing behaviour';

(4). to identify and discuss the key moderating variables influencing the relationship between the various factors of perception on 'intention to share' knowledge and actual 'knowledge sharing behaviour';

(5). to raise the major organisational and human resource development implications for formulating and implementing better knowledge management policies and practices in computer software and services companies.

HYPOTHESES

Knowledge management strategy is defined as a high-level plan that describes and outlines the processes, tools, and infrastructure (organisational and technological) required to manage knowledge gaps or excesses, and to permit knowledge to flow effectively in corporations (Zack, 2002). Knowledge management system should be

established in place to extrapolate the amount of information needed, required, obtained throughout the course of time, and transmitted from the existing generation to the future ones (Alavi & Leidner, 2001). Knowledge management enablers refer to organisational infrastructure to enhance efficiencies of knowledge management activities, such as codifying and sharing knowledge assets among individuals (Chan & Chau, 2005; Sarvary, 1999).

Knowledge management process is an ongoing, persistent, purposeful network of interactions among people aimed at managing other people, components, and activities participating in the basic knowledge processes (Firestone, 2001). Knowledge management process creates a planned, directed, and unified whole that produces, maintains, enhances, acquires, and transmits the enterprise's knowledge base (Firestone, 2001). Park (2006) described four dimensions of the knowledge management process: knowledge acquisition, knowledge protection, knowledge conversion, and knowledge application. Knowledge management performance consists of the benefits that can be reaped by appropriate knowledge management outcomes, such as productivity and profitability (Argot et al., 2000). According to Knowledge Management Research Report 2000 organisational size, subject focus, nationality and status had influence the knowledge management practice in organisation (Harris research, part of Taylor Nelson Sofres, 1999). Accordingly following hypotheses were framed.

HI: Organisational characteristics tend to influence the current status of knowledge management practices.

> **H1 (a):** There is significant association between year of establishment *and* current status of knowledge management practices.
>
> **H1 (b):** There is significant association between the business focus *and* current status of knowledge management practices.
>
> **H1 (c):** There is significant association between the scope of business *and* current status of knowledge management practices.
>
> **H1 (d):** There is significant association between the workforce size *and* current status of knowledge management practices

TPB, knowledge sharing behaviour of knowledge worker is theorized to be collectively determined by his/her intention towards knowledge sharing and his/her perceived behavioural control. Knowledge sharing behaviour is the degree to which knowledge worker actually shares knowledge with other members of his/her organisation. Intention measures knowledge worker's readiness to engage in knowledge sharing. Perceived behavioural control factors are dispositional factors that refer to the knowledge worker's beliefs about the perceived presence or absence of necessary resources and opportunities that may facilitate or impede knowledge sharing. PBC is expected to influence the knowledge sharing behaviours, especially, when there is an agreement between individual's perceptions of behaviour control and the actual control. Attitude towards knowledge sharing is formed from behavioural beliefs and refers to the degree of positive/negative feelings an individual has towards the intention to share knowledge with other members of the organisation.

According to TPB, subjective norm is formed from normative beliefs and refers to the individual's belief that important relevant others expect him/her to engage in behaviour of interest. In the organisational context, these relevant others include executive board, senior management, supervisor and the peer group. Industry surveys suggest that senior management drive knowledge management efforts. Management has control over employee compensation policies, performance appraisal and career advancement. As such, it is only natural that employees would want to comply with the management expectations of engaging in knowledge sharing behaviour.

Taylor and Todd (1995) found perceived behavioural control to be a significant predictor of technology usage intentions. Attitude indeed is formed from a collection of behavioural beliefs. Self-determination theory identifies the motivational influences of these beliefs to be both autonomous and controlled. Autonomy means approving one's actions with highest reflexivity.

Prior research in knowledge sharing has identified extrinsic motivators to be organisational rewards, expectations of reciprocity, reputation and loss of knowledge power (Gomez- Mejia and Balkin, 1990; Malhotra and Galletta, 1999; Bock et al, 2005; Deluga, 1998; Major et al., 1995; Parkhe, 1993; Sparrowe and Linden, 1997; Wasko and Faraj, 2000; Yamagishi and Cook , 1993 ; Davenport and Prusak, 1998; Kankanhalli, 2005, Gray, 2001; Thibaut and Kelley, 1986; Orlikowski, 1993;

Constant et al 1996; Kollock 1999) and intrinsic motivators to be pro-social behaviour, altruism, enjoyment in helping others and community advancement (Wasko and Faraj 2000; Brockner, 1988; Gardner and Pierce, 1998; Gecas, 1989; Stajkovic and Luthans, 1998). Organisational climate is the shared values, norms, meanings, beliefs, myths and underlying assumptions within an organisation. Organisational climate guides the employees behaviour by conveying to them what behaviour is appropriate and desirable. Subjective norms are formed when employees internalize and evaluate organisational values and norms. The effects of organisational climate on knowledge sharing has been widely studied (Constant et al. 1996; Huber 2001; Orlikowski 1993; Buckman, 1998; McDermott & O'Dell, 2001; Bock et al., 2005; Connelly and Kelloway, 2003). Information and communication technologies in the form of knowledge management systems (KMS) facilitate collaborative work and enable knowledge sharing, but only if they are actually used. Previous research in information systems suggests that individuals act in accordance to their beliefs about the availability and ease of use of the systems. In view of the inconsistent results found among the determinants, moderators, knowledge sharing intention and sharing behaviour of employees, following hypotheses were formulated.

H2: Employee's characteristics will have influence on Psycho-socio-technical determinants, perceived organisational climate, tools and technology, attitude towards knowledge sharing, subjective norm towards knowledge sharing, perceived behavioural control, intention towards knowledge sharing and knowledge sharing behaviour.

> **H2 (a):** Psycho-socio-technical determinants, perceived organisational climate, tools and technology, attitude towards knowledge sharing, subjective norm towards knowledge sharing, perceived behavioural control, intention towards knowledge sharing and knowledge sharing behaviour is significantly different between ***gender.***
>
> **H2 (b):** Psycho-socio-technical determinants, perceived organisational climate, tools and technology, attitude towards knowledge sharing, subjective norm towards knowledge sharing, perceived behavioural control, intention towards knowledge sharing and knowledge sharing behaviour is significantly different among ***age*** category.

H2 (c): Psycho-socio-technical determinants, perceived organisational climate, tools and technology, attitude towards knowledge sharing, subjective norm towards knowledge sharing, perceived behavioural control, intention towards knowledge sharing and knowledge sharing behaviour is significantly different among ***education qualification.***

H2 (d): Psycho-socio-technical determinants, perceived organisational climate, tools and technology, attitude towards knowledge sharing, subjective norm towards knowledge sharing, perceived behavioural control, intention towards knowledge sharing and knowledge sharing behaviour is significantly different among level of ***experience.***

H3: Psycho-socio-technical determinants have a positive impact on the employee's knowledge sharing attitude, intention and behaviour.

H3 (a): Psycho-socio-technical determinants a have positive effect on the employee's attitude towards knowledge sharing

H3 (b): Psycho-socio-technical determinants have a positive effect on the employee's knowledge sharing intention

H3 (c): Psycho-socio-technical determinants have a positive effect on the employee's knowledge sharing behaviour

H4: Perceived organisational climate have a positive impact on the employee's subjective norms, knowledge sharing intention and behaviour.

H4 (a): Perceived organisational climate has a positive effect on the employee's subjective norms towards knowledge sharing.

H4 (b): Perceived organisational climate has a positive effect on the employee's knowledge sharing intention.

H4 (c): Perceived organisational climate has a positive effect on the employee's Knowledge sharing behaviour.

H5: Tools and technology have a positive impact on the employee's perceived behaviour control, knowledge sharing intention and behaviour.

H5 (a): Tools and technology have a positive impact on the employee's perceived behaviour control towards knowledge sharing.

H5 (b): Tools and technology have a positive impact on the employee's knowledge sharing intention

H5 (c): Tools and technology have a positive impact on the employee's knowledge sharing behaviour

H6: The employee characteristics tend to *moderate* the relationship between the attitude, subjective norm and perceived behaviour control towards intention to share the knowledge

H6 (a): ***Gender*** of the employee's tends to *moderate* the relationship between the attitude, subjective norm *and p*erceived behaviour control towards intention to share the knowledge.

H6 (b): ***Age*** of the employee's tends to *moderate* the relationship between the attitude, subjective norm *and* perceived behaviour control towards intention to share the knowledge

H6 (c): ***Education*** of the employee's tends to *moderate* the relationship between the attitude. subjective norm *and* behaviour control towards intention to share the knowledge.

H6 (d): ***Experience*** of the employee's tends to *moderate* the relationship between the attitude, subjective norm *and* behaviour control towards intention to share the knowledge.

H7: The employee characteristics tend to *moderate* the relationship between the knowledge sharing intention *and* actual knowledge sharing behaviour.

H7 (a): ***Gender*** of the employees tends to *moderate* the relationship between the knowledge sharing intention *and* actual knowledge sharing behaviour.

H7 (b): ***Age*** of the employees tends to *moderate* the relationship between the knowledge sharing intention to *and* actual knowledge sharing behaviour.

H7 (c): ***Education*** of the employees tends to *moderate* the relationship between the knowledge sharing intention *and* actual knowledge sharing behaviour.

H7 (d): ***Experience*** of the employees tends to *moderate* the relationship between the knowledge sharing intention *and* actual knowledge sharing behaviour.

H8: The employee characteristics tend to *moderate* the relationship between the perceived behaviour control towards knowledge sharing intention *and* actual knowledge sharing behaviour.

H8 (a): ***Gender*** of the employee's tends to *moderate* the relationship between the perceived behaviour control towards knowledge sharing intention *and* actual knowledge sharing behaviour.

H8 (b): ***Age*** of the employee's tends to *moderate* the relationship between the perceived behaviour control towards knowledge sharing intention *and* actual knowledge sharing behaviour.

H8 (c): ***Education*** of the employee's tends to *moderate* the relationship between the perceived behaviour control towards knowledge sharing intention *and* actual knowledge sharing behaviour.

H8 (d): ***Experience*** of the employee's tends to *moderate* the relationship between the perceived behaviour control towards knowledge sharing intention *and* actual knowledge sharing behaviour.

RESEARCH METHODOLOGY

The present quantitative-empirical, survey-based research study is partly descriptive (what, where, when, who and how) and partly diagnostic (why) in nature. The researcher relied on primary data and information for the purpose of developing the thesis to a very large extent. However, secondary sources of data were also consulted with a view to formulating the conceptual and theoretical framework, identifying the research gap through a systematic review of previous research studies and understanding the nature and scope of knowledge management in the domain of human resource development. As a research instrument, two separate questionnaires were used to collect primary data, one each for capturing the broad trends in and status of Knowledge management policies and practices in the responding computer software and services companies in Karnataka **and** identifying the determinants, moderators and impact factors of knowledge sharing intention and their actual knowledge behaviour perceived and reported by the employees. A focus group interview was conducted involving HRD/Chief Knowledge Officer/Chief Information Officer/ Chief Executive Officer and a few employees working for six computer software and services companies in Karnataka.

Later on, the transcriptions and observations of the focus group interview assisted the researcher in preparing the draft questionnaires for both the surveys. Again, these two draft questionnaires were personally administered to the HRD/Chief Knowledge Officer/ Chief Information Officer/Chief Executive Officer of 9 computer software and services firms in Bangalore and 25 employees in those chosen firms. This pilot study was very useful in pre-testing the draft questionnaires and finalising them with relevant modifications.

The first questionnaire (Appendix-1) was used for assessing the Knowledge Management Policies and Practices –trends in and status. The Directory of National Association of Software and Services Companies (NASSCOM-Karnataka) served as the database with 536 mailing addresses. This questionnaire was e-mailed (online survey) to all the firms listed in the above database in January to June 2019. During the first three months, 252 (47.01% initial response rate) filled-in questionnaires were received. A further request was made to the non-respondents (284) either by sending reminder e-mail or by telephone. This follow-up resulted in the collection of an additional 114 (21.27% additional response rate) completed questionnaires during the next three months, thereby, yielding the total gross response rate of 68.28 per cent (366). After carefully going through and editing the filled-in questionnaires, the researcher eliminated 32 incomplete questionnaires rendering only 334 usable questionnaires for further analysis. Hence, the effective response rate was 62.31 per cent (334 x 100/536). This response rate is generally considered as acceptable in view of the response rates usually reported by other researchers in similar studies (CIPD-UK, 2002: **30%** (153/502X100)**;** CIPD-IRISH, 2003: **44%** (120/275X100); Yadapadithaya, 2003: **62%** (496/800X100). These respondent organisations included 193 IT services, 48 Business Process Outsourcing (BPO) / Business Process management (BPM), 52 Software products, 19 Engineering research & design (ER&D), 7 Internet and e-commerce, 4 Educational and consultancy services, and 11 others (animation and gaming, business management consultant and certification, trade and investment, staffing solution, telecom service, real estate and infrastructure). The first questionnaire (Appendix-1) consisted of three parts (Part-A 1.1 to 1.6; Part-B 2.1 to 2.14; Part-C 3.1 to 3.2; Total-22 questions). Part-A contained questions about organisational characteristics (6 questions) and part-B intended to elicit the responses pertaining to key trends and status of knowledge management (14 questions). Finally,

part-C included an open-end provision for recording any other data, information and observations not covered in the earlier parts (2 questions). The first questionnaire was processed using the SPSS–Version (20). Statistical tools and techniques such as descriptive statistics (Mean and Standard Deviation), and chi-square test of significance were used to analyse and interpret the field survey data.

The main purpose of administering the second questionnaire to sample respondents working for selected computer software and services companies in Karnataka was to elicit their views and perceptions about the key factors influencing the intention to share knowledge and actual knowledge sharing behaviour based on the modified version of the TPB model (Appendix-2). Annual HR survey of NASSCOM was the basis for choosing a purposive sample of 20 companies for conducting diagnostic interviews about the determinants of knowledge sharing intention and actual knowledge sharing behaviour. Out of 20 companies featured in this survey, only 9 companies positively responded to the written request of the researcher and permitted to interview the employees during their non-working hours with a condition of not disclosing the name of the company. Accordingly, basic details of those companies against their fictitious names are furnished in table 1.5.

Table 1.5 Diagnostic interview: Company details

SL. NO	Company	Year of Establishment and services	Market served	Workforce Size	Global Head Quarters
(1).	Company A	1994 IT, business consulting and outsourcing services	Global	Above 15000	USA
(2).	Company B	1981 IT Services, Engineering/Embedded/R& D, Product	Global	Above 15000	India
(3).	Company C	1955 IT Services, BPM, Internet & eCommerce, Engineering/Embedded/R& D, Product	Global	Above 15000	India
(4).	Company D	1999 IT Services,	Global	Between 10001 to	India

		Engineering/Embedded/R&D, Product, Internet & eCommerce		15000	
(5).	Company E	2001 BPM	Global	Above 15000	India
(6).	Company F	1993 BPM	Global	Between 10001 - 15000	India
(7).	Company G	1989 IT Services, BPM, Engineering/Embedded/R&D	Global	Above 15000	USA
(8).	Company H	1992 IT Services, BPM, Internet & eCommerce, Engineering/Embedded/R&D, Product	Global	Above 15000	India
(9).	Company I	1997 IT Services	Global	Above 15000	India

The respondents were employees working for these 9 computer software and services companies in Karnataka practising knowledge sharing behaviour. A disproportionate stratified random sampling technique was used and this process resulted in the collection of 547 responses during March to June 2019. The questionnaire was personally administered by the researcher to the respondents and on an average it took 20 minutes to complete the enumeration.

The second questionnaire (Appendix-2) consisted of two parts (Part-A 1-4; Part-B 5.1 to 5.14; Total-18 questions). Part-A contained of questions about demographic profile of the employees (4 questions). Part-B consisted of questions relating to factors of perception on knowledge sharing behaviour (14 questions). The researcher made it a point to continue the interview process until getting the identical responses to leading questions in the questionnaire before reaching the reported sample size in this study. Various statistical tools were used for analysing the collected data such as:

1. Reliability Test and Validity
2. Percentage Analysis
3. Descriptive Analysis
4. Chi-Square Test

5. t- test for Single mean
6. One-way ANOVA
7. Correlation Analysis
8. Correlation Analysis -Multi Group Comparison
9. Simple Regression Analysis
10. Multiple Regression Analysis

Development and Validation of Data Collection Instrument

A reliable and valid research instrument is critical for any study, and the construction of the questionnaire involved a number of stages in the current research effort. The current study included two distinct approaches to data creation and validation.

1. Validity Testing
2. Reliability Testing.

Table 1.6 presents a Cronbach Alpha Test for Reliability and Validity (Pearson Correlation Method)

Table 1.6: Cronbach Alpha Test for Reliability and Validity (Pearson Correlation Method)

Variable	Cronbach's Alpha	No. of Items	Mean	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Perceived organisational incentives	.990	5	1.7181		.428**	.461**	.379**	.437**	.395**	.474**	.527**	.447**	.384**	.414**	.457**	.469**	.476**
Perceived reciprocal benefits	.978	3	4.0731		1	.987**	.983**	.986**	.985**	.971**	.957**	.984**	.979**	.986**	.983**	.978**	.979**
Perceived reputation enhancement	.986	6	3.9528			1	.973**	.993**	.980**	.993**	.983**	.997**	.975**	.990**	.997**	.993**	.996**
Perceived loss of knowledge power	.968	4	4.2441				1	.984**	.994**	.948**	.926**	.972**	.996**	.988**	.967**	.969**	.960**
Perceived enjoyment in helping others	.964	4	4.0366					1	.986**	.984**	.966**	.992**	.985**	.992**	.989**	.989**	.989**
Affiliation	.976	4	4.2025						1	.959**	.936**	.980**	.995**	.992**	.977**	.977**	.969**
Innovativeness	.981	3	3.8592							1	.988**	.993**	.953**	.977**	.994**	.989**	.996**
Fairness	.958	3	3.7562								1	.979**	.930**	.957**	.983**	.984**	.989**
Tools and technology	.990	8	3.9943									1	.977**	.993**	.998**	.993**	.997**
Attitude towards Knowledge Sharing	.974	5	4.2322										1	.991**	.972**	.974**	.964**
Subjective Norm towards Knowledge Sharing	.979	5	4.1035											1	.990**	.988**	.984**
Perceived Behavioural Control	.979	6	3.9647												1	.994**	.997**
Intention Towards Knowledge Sharing	.967	7	4.0264													1	.993**
Knowledge sharing Behaviour	.980	7	3.8859														1

1. Perceived organisational incentives
2. Perceived reciprocal benefits
3. Perceived reputation enhancement
4. Perceived loss of knowledge power
5. Perceived enjoyment in helping others
6. Affiliation
7. Innovativeness
8. Fairness
9. Tools and technology
10. Attitude towards Knowledge Sharing
11. Subjective Norm towards Knowledge Sharing
12. Perceived Behavioural Control
13. Intention towards Knowledge Sharing
14. Knowledge sharing Behaviour

The reliability coefficient in this study ranges from 0 to 1 based on Cronbach's alpha. All of the components in this investigation had a Cronbach alpha value of 0.7 or higher. As a result, all of the items in the questionnaire's various categories were kept. Considering the correlation value most of the r value shows more than 0.50, as the p value is less than 0.05. The significance value < 0.05, then the instrument is declared valid.

SCOPE AND LIMITATIONS

The present study mainly concentrated on understanding the key trends and status of knowledge management and determinants of knowledge sharing intention and behaviour of knowledge sharing in selected computer software and services companies in Karnataka. It is worth noting that this study was confined only to the selected computer software and services companies in Karnataka and the research conclusions and inferences drawn based on the findings of this micro study cannot be generalised to other parts of the country or other nations of the world due to cross-regional and cross-cultural differences.

Nevertheless, this study throws sufficient light on the major key factors influencing knowledge sharing intention and actual knowledge sharing behaviour and knowledge creation, storage, sharing and application, key responsibility for km, km linkage to corporate strategy, knowledge domains, major causes and drivers, km metrics, Role and relevance of IT, Organisational enablers, Benefits and key issues and challenges of knowledge management in computer software and services companies representing both Indian and global enterprises in Karnataka.

CHAPTER CLASSIFICATION

The present research study titled ― KNOWLEDGE MANAGEMENT POLICIES AND PRACTICES – A STUDY WITH REFERENCE TO COMPUTER SOFTWARE AND SERVICES COMPANIES IN KARNATAKA is coordinated in the following six chapters.

Chapter-1 **"Introduction"** provides a brief overview of the subject matter comprising conceptual framework, statement of the research problem, research questions, objectives, hypotheses and scope and limitations. In the end, chapter classification is also provided.

Chapter-2 **"Review of literature"** presents survey of earlier research studies along with a critical review of literature aiming at identifying and defining the research gap in the current field of investigation. In this context review is organised and integrated into three main parts in order to comprehend the state of the current knowledge management.

(1) Trends and status of knowledge management, (2) Empirical studies carried out knowledge sharing behaviour and (3) Empirical studies carried out using Theory of Planned Behaviour model.

Chapter-3 **"Knowledge Management: Theoretical Models"** is intended to provide a detailed theoretical background of the study touching upon significant models in the context of knowledge management.

Chapter-4 **"Knowledge Management Policies and Practices: Trends and Status"** is devoted to a detailed description of the current scenario of tools for knowledge creation, storage, sharing and application, key responsibility for KM, KM linkage to corporate strategy, knowledge domains, major causes and drivers of KM initiatives, KM metrics, role and relevance of IT, organisational enablers, benefits of KM initiatives and key issues and challenges of knowledge management.

Chapter-5 **"Knowledge Sharing Behaviour: Key Determinants"** highlights and discusses the major factors influencing the relationship between the behavioural intention to share ***and*** employees actual behaviour of knowledge sharing. Further, employee's characteristics are examined with regard to the possible impact on moderating the relationship between knowledge sharing intention and the actual behaviour of knowledge sharing.

Chapter-6 **"Summary and Conclusion"** provides a capsule summary of the major results and discussions presented in chapter IV and V along with important organisational and HRD implications for policies and practices of knowledge management in computer software and services companies along with some directions for further research in this field and concluding observations.

SUMMARY OF MAJOR FINDINGS

The major findings pertaining to the present study are briefly summarized in the following sections under two categories; (a) Policies and practices of knowledge management: trends and status and (b) determinants of knowledge sharing behaviour.

I. Policies and practices of knowledge management: Trends and status

- Out of 334 organisations responding to the survey, as many as nearly 64 per cent were set up during 1991-2010. More than one-half engaged in information technology services. Around 54 per cent reported their global presence in terms of markets served. More than one-half had the workforce size of fewer than 200 employees.
- More than one-half already adopted KM practices.
- In terms of organisations concerned, the most prominent functionaries who looked after KM included, Senior General Manager, Chief Knowledge Officer, no one in responsibility for managing KM initiatives and Knowledge Champion in that order.
- More than one-half of organisation reported that their KM initiatives constituted a substantial part of their **corporate strategy.**
- Pressure for increased quality, innovation and productivity on the one hand and to earn and sustain competitive advantage on the other hand emerged as the **major driving forces** for implementing KM initiatives in the respondent units.
- The first three most important **knowledge domains** perceived, ranked and reported by the respondent organisations were: customer service, competition and international operations in that order.
- It is disturbing to note that most of the organisations did not have any system to measure and assess the business value of KM.
- Technical training and organisational culture were the important **organisational enablers** in the computer and software services industry.
- Collaboration for searching knowledge is the major **role and relevance of IT in KM.** according to 58.7 per cent of respondent's organisation.
- The learning from past projects has significantly contributed to tools **knowledge creation** in organisations. Besides interaction with superiors, self-

motivation to learn, discussion in project meetings and customer feedback and recommendation also contributed significantly to knowledge creation.

- The project reports significantly contributed to tools for **knowledge storage** in organisations. Besides electronic databases, multimedia databases and DBMS also made significant contributed to knowledge storage.
- The team collaboration significantly contributed to tools for **knowledge sharing**. Variables such as 'training sessions' and 'personal motivation to share knowledge' also contributed significantly to knowledge sharing in the organisation.
- Applying knowledge in projects and working with diverse project contributed significantly to tools for **knowledge application** in the respondent organisations. Hence it is obvious that the projects play a significant role in knowledge application.
- Major proportions of the responding organisations perceived and reported the **principal benefits** flowing from KM initiatives such as improving work processes; improved customer service and proactive marketing; reduced response time, cycle time, lead time, and faster delivery to market through more effective supply chain management; facilitates the sharing or transferring best practices across vertical and horizontal organisational boundaries.
- **The key issues and challenges** endorsed by many organisations were: measuring and assessing the business value of KM, changing the mind-set of the people from knowledge hoarding sentiment to knowledge sharing culture, linking KM to business strategy and goals, and gearing up technical infrastructure with more budgetary allocations.
- The researcher also made an attempt to test the **research hypothesis H1: *"Organisational characteristics tend to influence the current status knowledge management practices".*** Based on the result of chi-square statistic, it was confirmed that, three organisational characteristic such as business focus (nature of the main activity), scope of business (markets served) and workforce size (total number of employees) are not influenced the current status knowledge management practices but the establishment year (age of the organisation) significantly influenced the current status knowledge management practices**.**

II. Knowledge sharing intention and behaviour: Key determinants

(a) Multi-Group Comparison of Correlation

Correlation between attitude towards knowledge sharing, intention towards knowledge sharing and knowledge sharing behaviour among gender, age, educational qualification and experience.

- Based on the correlation result the female employees have lowest associated (r=.970) with attitude towards knowledge sharing and Intention towards knowledge sharing but have high correlation (r=.972) between attitude towards knowledge sharing and knowledge sharing behaviour than male employees. But correlation between attitude towards knowledge sharing and intention towards knowledge sharing is higher among male employees (r=0.978) than female employees (r=0.970) (Table 5.24).
- Correlation between Attitude towards knowledge sharing and intention towards knowledge sharing is higher among employees aged 36-45 (r=0.997) compared other aged groups of employees. It also revealed that correlation between attitude towards knowledge sharing and knowledge sharing behaviour is higher among 36-45 aged groups (r=0.999) than other age groups (Table 5.25).
- The perfect correlation between attitude towards knowledge sharing and intention towards knowledge sharing among diploma holders (r=1) and showed comparatively lower correlation among postgraduate qualified employees (r=.962). It also revealed that correlation between attitude towards knowledge sharing and knowledge sharing behaviour is higher among diploma holder (r=0.999) compared to other qualifications (Table 5.26).
- The correlation between attitude towards knowledge sharing and intention towards knowledge sharing is higher among the employees having experience 5-8 years (r=0.991) compared to other experienced employees. It also revealed that correlation between attitude towards knowledge sharing and knowledge sharing behaviour is higher among the employees having experience of 5-8 years followed by employees having experience of up to 2 years (r=0.987) (Table 5.27).

Correlation between subjective norm towards knowledge sharing and intention towards knowledge sharing and knowledge sharing behaviour among gender, age, educational qualification and experience.

- The correlation between subjective norm towards knowledge sharing and intention towards knowledge sharing is higher among male employees (r=0.988) compared to female employees (r=0.984). It also exhibited highest correlation between subjective norm towards knowledge sharing and knowledge sharing behaviour among male employees (r=0.985) than female employees (r=0.984) (Table 5.28).
- The correlation between subjective norms towards knowledge sharing and intention towards knowledge sharing is higher among employees of age group between 36-45 (r=0.999) and it showed highest correlation between subjective norm towards knowledge sharing and knowledge sharing behaviour among employees of age group between 36-45 (r=0.982) compared to other age groups (Table 5.29).
- The correlation between subjective norms towards knowledge sharing and intention towards knowledge sharing is higher among employees having diploma qualification (r=1) and it showed highest correlation between subjective norm towards knowledge sharing and knowledge sharing behaviour among employees having diploma qualification (r=0.999) compared to other education qualification (Table 5.30).
- The correlation between subjective norms towards knowledge sharing and intention towards knowledge sharing is higher among employees having experience of 5-8 years (r=0.996) and it showed highest correlation between subjective norm towards knowledge sharing and knowledge sharing behaviour among employees having 5-8 years of experience (r=0.982) compared to other experienced employees (Table 5.31).

Correlation between perceived behavioural control towards knowledge sharing and intention towards knowledge sharing and knowledge sharing behaviour among gender, age, educational qualification and experience.

- The correlation between perceived behavioural control and intention towards knowledge sharing is higher among female employees (r=0.995) compared to

male employees (r=0.994) and it showed highest correlation between perceived behavioural control and knowledge sharing behaviour among male employees (r=0.998) compared to female employees (r=0.994) (Table 5.32).

- The correlation between perceived behavioural control and intention towards knowledge sharing is higher among employees of age group between 36-45 (r=0.998) compared to other age group employees and it showed highest correlation between perceived behavioural control and knowledge sharing behaviour among employees of age group between 36-45 (r=0.999) compared to other age group of employees (Table 5.33).
- The correlation between perceived behavioural control and intention towards knowledge sharing is higher among employees having diploma qualification (r=1) compared to other qualification groups of employees and it showed highest correlation between perceived behavioural control and knowledge sharing behaviour among employees having diploma qualification (r=0.999) compared to other qualification of employees (Table 5.34).
- The correlation between perceived behavioural control and intention towards knowledge sharing is higher among employees having experience of 5-8 years (r=0.999) compared to other experienced employees and it showed highest correlation between perceived behavioural control and knowledge sharing behaviour among employees having experience of 5-8 years (r=0.999) compared to other experienced employees (Table 5.35).

Correlation between knowledge sharing intention and knowledge sharing behaviour among gender, age, educational qualification and experience.

- The correlation between knowledge sharing intention and knowledge sharing behaviour is higher among male employees (r=.998) compared to female of employees (r=0.994) (Table 5.36).
- The correlation between knowledge sharing intention and knowledge sharing behaviour is higher among the employees of age group between 36-45 (r=.997) compared to employees age group of 25 or under (r=0.989) and employees of age group between 26-35 (r=0.994) (Table 5.37).
- The correlation between knowledge sharing intention and knowledge sharing behaviour is higher among employees having diploma degree (r=.999)

compared to employees having bachelor's degree (r=0.997) and employees having postgraduate (r=0.986) (Table 5.38).

- The correlation between knowledge sharing intention and knowledge sharing behaviour is higher among the employees having experience of up to 2 years (r=0.999) compared to employees having experience of 2-5 years (r=0.998) and employees of having experience of above 8 years (r=0.979). (Table 5.39).

(b) Hypotheses testing

- Out of 547 employees responding to the survey, around 70 per cent were male members and the female employees accounted for just over 30 per cent (Table 5.1). Around 93 per cent of the sample consisted of young employers having Up to 35 years of age (Table 5.2). The 95 per cent were either graduates or post graduates (Table- 5.3). The one-half of the employees had put in up to 5 years of service in their current jobs (Table 5.4).
- The results of independent sample between gender and factors revealed that Psycho-socio-technical determinants, perceived organisational climate, tools and technology attitude towards knowledge sharing, subjective norm towards knowledge sharing, perceived behavioural control, intention towards knowledge sharing and knowledge sharing behaviour is significantly different between gender as the p value is less than 0.01, (Table 5.40) H2 (a).
- As per the ANOVA results it was found that all the factors such as Psycho-socio-technical determinants, perceived organisational climate, tools and technology attitude towards knowledge sharing, subjective norm towards knowledge sharing, perceived behavioural control, intention towards knowledge sharing and knowledge sharing behaviour shows remarkable difference among age categories, as the p value is less than 0.01, (Table 5.41) H2 (b).
- The results of One-way ANOVA between factors and educational qualification. Considering the results from the above table it can be presented that there is significant difference in Psycho-socio-technical determinants, perceived organisational climate, tools and technology, attitude towards knowledge sharing, subjective norm towards knowledge sharing, perceived behavioural control, intention towards knowledge sharing and knowledge

sharing behaviour among educational qualification as the p value is less than 0.01 at 99% confidence interval (Table 5.42) H2 (c).

- The result of one way ANOVA between the factors and experience of the respondents. Outcome of the one way ANOVA revealed, there is significant difference in Psycho-socio-technical determinants, perceived organisational climate, tools and technology, attitude towards knowledge sharing, subjective norm towards knowledge sharing, perceived behavioural control, intention towards knowledge sharing and knowledge sharing behaviour among the level of experiences, as the p value significant i.e. less than 0.01 (Table 5.43) H2 (d).
- Coefficient of Correlation (R=0.997) analysis indicated, that there is a relationship between Psycho-socio-technical determinants and attitude towards knowledge sharing. R Square value (0.994) represents the Contribution of Coefficient of determination on independent variable to dependent variable the effect of Psycho-socio-technical determinants contributing attitude towards knowledge sharing by 99.4% and remaining 0.06% are not studied. The adjusted R square (0.994) indicates the variation of variable. Most of the Psycho-socio-technical determinants (R=.997, R^2=.994, F= 17693.106, p<0.01**) (Table 5.44) have a positive effect on the employee's attitude towards knowledge sharing H3 (a).
- Coefficient of correlation (R=0.994) analysis indicated that there is a relationship between Psycho-socio-technical determinants and knowledge sharing intention. R Square value (0.987) represents the Contribution of Coefficient of determination on independent variable to dependent variable the effect of Psycho-socio-technical determinants contributing attitude towards knowledge sharing by 99.2% and remaining 0.08% are not studied. The adjusted R square (0.987) indicates the variation of variable. Most of the Psycho-socio-technical determinants (R=.994, R^2=.987, F= 8445.984, p<0.01**) (Table 5.44) have an effect on the employee's attitude towards knowledge sharing intention, H3 (b).
- Coefficient of correlation (R=0.998) analysis indicated that there is a relationship between Psycho-socio-technical determinants and knowledge sharing behaviour. R Square value (0.995) represents the Contribution of

Coefficient of determination on independent variable to dependent variable the effect of Psycho-socio-technical determinants contributing attitude towards knowledge sharing by 99.3% and remaining 0.07% are not studied. The adjusted R square (0.995) (Table 5.44) indicates the variation of variable. Considering the overall most of the Psycho-socio-technical determinants will not have positive effect on the employee's knowledge sharing behaviour, H3 (c).

- Coefficient of correlation (R=0.987) analysis indicated that there is a relationship between organisational climate and subjective norms towards knowledge sharing. R Square value (0.974) represents the Contribution of Coefficient of determination on independent variable to dependent variable the effect of organisational climate contributing subjective norms towards knowledge sharing. The adjusted R square (0.974) indicates the variation of variable. Organisational climate (R=.987, R^2=.974, F= 20581.686, p<0.01**) (Table 5.45) have a positive effect on the employee's subjective norms towards knowledge sharing, H4 (a).
- Coefficient of correlation (R=0.996) analysis indicated that there is a relationship between organisational climate and knowledge sharing intention. R Square value (0.992) represents the Contribution of Coefficient of determination on independent variable to dependent variable the effect of organisational climate contributing knowledge sharing intention. The adjusted R square (0.992) indicates the variation of variable. Organisational climate (R=.996, R^2=.992, F=64797.866, p<0.01**) (Table 5.45) have a positive effect on the employee's knowledge sharing intention, H4 (b).
- Coefficient of correlation (R=0.998) analysis indicated that there is a relationship between organisational climate and knowledge sharing behaviour. R Square value (0.996) represents the Contribution of Coefficient of determination on independent variable to dependent variable the effect of organisational climate contributing knowledge sharing behaviour. The adjusted R square (0.996) indicates the variation of variable. Organisational climate (R=.998, R^2=.996, F= 152062.377, p<0.01**) (Table 5.45) have a positive effect on the employee's subjective norms towards knowledge sharing, H4 (c).

- Coefficient of correlation (R=0.998) analysis indicated that there is a relationship between tools and technology and perceived behaviour control. R Square value (0.997) represents the Contribution of Coefficient of determination on independent variable to dependent variable the effect of tools and technology contributing perceived behaviour control. The adjusted R square (0.997) indicates the variation of variable. Tools and technology (R=.998, R^2=.997, F= 164904.140, p<0.01**) (Table 5.46) have a positive effect on the employee's perceived behaviour control, H5 (a).
- Coefficient of correlation (R=0.993) analysis indicated that there is a relationship between tools and technology and knowledge sharing intention. R Square value (0.987) represents the Contribution of Coefficient of determination on independent variable to dependent variable the effect of tools and technology contributing knowledge sharing intention. The adjusted R square (0.986) indicates the variation of variable. Tools and technology (R=.993, R^2=.987, F= 39850.060, p<0.01**) (Table 5.46) have a positive effect on the employee's knowledge sharing intention, H5 (b).
- Coefficient of correlation (R=0.997) analysis indicated that there is a relationship between tools and technology and knowledge sharing behaviour. R Square value (0.993) represents the Contribution of Coefficient of determination on independent variable to dependent variable the effect of tools and technology contributing knowledge sharing behaviour. The adjusted R square (0.993) indicates the variation of variable. Tools and technology (R=.997, R^2=.993, F=79313.102, p<0.01**) (Table 5.46) have a positive effect on the employee's knowledge sharing behaviour, H5 (c).

Impact of moderating variables

Furthermore, individual characteristics of the employees (gender, age, education and job experience) moderated the relationship between the attitude, subjective norm and perceived behaviour control towards intention to share knowledge (H6) (table 5.47 to table 5.50). Gender, age, education and job experience of the employees moderate the relationship between the intention to knowledge sharing and actual knowledge sharing behaviour and behaviour control towards knowledge sharing and actual knowledge sharing behaviour (H7) (Table 5.51 to table 5.54), (H8) (Table 5.55 to table 5.58).

TABLE 6.1: SUMMARY OF HYPOTHESES TESTING

Sl. No.	Hypotheses	Research questions	Objectives	Statistical tools	Result	Remarks
1.	H1: Organisational characteristics tend to influence the current status of knowledge management practices. [H1(a), H1(b), H1 (c), H1(d)]	RQ 1: What are the broad trends and status of knowledge management policies and practices in computer software and services companies in Karnataka?	Obj. 2: To analyse and interpret the views and perceptions of HRD/IT managers about the key responsibility for KM, KM linkage to corporate strategy, Knowledge domains, major causes and drivers, KM metrics, role and relevance of IT, organisational enablers, knowledge creation, storage, sharing and application, benefits of KM and key issues and challenges of knowledge management in their respective organisations.	Chi-square test	Rejected (Table 4.20, 4.21, &4.22) Accepted (Table 4.19)	Business focus (nature of the main activity), scope of business (markets served) and workforce size (total number of employees) not influenced the current status of knowledge management practices but establishment year (age of the organisation) significantly influenced the current status of knowledge management practices
2.	H2: Employees' characteristics will have influence on Psycho-socio-technical determinants, perceived organisational climate, tools and technology, attitude towards knowledge sharing, subjective norm towards knowledge sharing, perceived behavioural control, intention towards knowledge sharing and knowledge sharing behaviour. [H2(a), H2(b), H2(c),	RQ 2: What are the major motivational factors influencing the employees for 'intention to share' knowledge and actual knowledge sharing behaviour in respect of computer software and services companies in Karnataka?	Obj. 3: to determine the major motivational factors influencing the employees for "intention to share knowledge" and actual knowledge sharing behaviour.	t-test, One-way ANOVA	Accepted (Table 5.40, 5.41, 5.42, & 5.43)	Employees characteristics will have influence on psycho-socio-technical determinants, perceived organisational climate, tools and technology, attitude towards knowledge sharing, subjective norm towards knowledge sharing, perceived behavioural control, intention towards knowledge sharing and knowledge sharing behaviour.

	H2(d)]					
3.	H3: Psycho-socio-technical determinants have a positive impact on the employee's knowledge sharing attitude, intention and behaviour. [H3(a), H3(b), H3(c)]	RQ 2: What are the major motivational factors influencing the employees for 'intention to share' knowledge and actual knowledge sharing behaviour in respect of computer software and services companies in Karnataka?	Obj. 3: to determine the major motivational factors influencing the employees for "intention to share knowledge" and actual knowledge sharing behaviour.	Multiple Regression Analysis	Accepted H3(a) & H3(b) Rejected H3(c) (Table 5.44)	Psycho-socio-technical determinants had a positive effect on the employee's attitude towards knowledge sharing and knowledge sharing intention. But psycho-socio-technical determinants have a negative effect on the employee's knowledge sharing behaviour.
4.	H4: Perceived organisational climate has a positive impact o the employee's subjective norms, knowledge sharing intention and behaviour [H4a), H4(b), H4(c)]	RQ 2: What are the major motivational factors influencing the employees for 'intention to share' knowledge and actual knowledge sharing behaviour in respect of computer software and services companies in Karnataka?	Obj. 3: to determine the major motivational factors influencing the employees for "intention to share knowledge" and actual knowledge sharing behaviour.	Multiple Regression Analysis	Accepted (Table 5.45)	Perceived organisational climate had a positive effect on the employee's subjective norms towards knowledge sharing and perceived organisational climate
5.	H5: Tools and technology have a positive impact on the employee's perceived behaviour control, knowledge sharing intention and behaviour. [H5a), H5(b), H5(c)]	RQ 2: What are the major motivational factors influencing the employees for 'intention to share' knowledge and actual knowledge sharing behaviour in respect of computer software and services companies in Karnataka?	Obj. 3: to determine the major motivational factors influencing the employees for "intention to share knowledge" and actual knowledge sharing behaviour.	Multiple Regression Analysis	Accepted (Table 5.46)	Tools and technology had a positive impact on the employee's perceived behaviour control towards knowledge sharing, knowledge sharing intention and knowledge sharing behaviour.
6.	H6: The employee characteristics tend to *moderate* the	RQ 3: Do employees characteristics moderate the relationship between	Obj. 4: to identify and discuss the key moderating variables influencing the relationship between the various factors of	Multiple Regression Analysis	Accepted (Table 5.47, 5.48, 5.49 &	The gender, age, experience and education had moderated the relationship between the

	relationship between, the attitude, subjective norm and perceived behaviour control towards intention to share the knowledge [H6(a), H6(b), H6(c), H6(d)]	the various factors of perception on 'intention to share' knowledge and actual knowledge sharing behaviour?	perception on 'intention to share' knowledge and actual knowledge sharing behaviour.		5.50)	attitude, subjective norm and perceived behaviour control towards intention to share the knowledge.
7.	H7: The employee characteristics tend to *moderate* the relationship between the behavioural intention to knowledge sharing *and* actual knowledge sharing behaviour. [H7(a), H7(b), H7(c), H7(d)]	RQ 3: Do employees characteristics moderate the relationship between the various factors of perception on 'intention to share' knowledge and actual knowledge sharing	Obj. 4: to identify and discuss the key moderating variables influencing the relationship between the various factors of perception on 'intention to share' knowledge and actual knowledge sharing behaviour.	Multiple Regression Analysis	Accepted (Table 5.51, 5.52, 5.53 & 5.54)	The gender, age, experience, and education had moderated the relationship between the 'knowledge sharing intention' *and* 'knowledge sharing behaviour'.
8.	H8: The employee characteristics tend to *moderate* the relationship between the perceived behaviour control towards knowledge sharing intention *and* actual knowledge sharing behaviour. [H8(a), H8(b), H8(c), H8(d)]	RQ 3: Do employees characteristics moderate the relationship between the various factors of perception on 'intention to share' knowledge and actual knowledge sharing	Obj. 4: to identify and discuss the key moderating variables influencing the relationship between the various factors of perception on 'intention to share' knowledge and actual knowledge sharing behaviour.	Multiple Regression Analysis	Accepted (Table 5.55, 5.56, 5.57 & 5.58)	The gender, age, experience, and education had moderated the relationship between the perceived behavioural control towards knowledge sharing intention *and* knowledge sharing behaviour.

IMPLICATIONS

The organisational and managerial implications of the key findings provide significant benefits not only for the individual employees of the computer software and services companies but also to the managers and IT head/HRD manager to incorporate the right strategies and plans to enhance knowledge management policies and practices. Significantly, the implications of using the modified Theory of Planned Behaviour model provide an understanding of the relationships between key determinants of knowledge sharing intention and actual knowledge sharing behaviour. Along with a thumb-nail sketch of broad trends in and status of knowledge management policies and practices, this study has got far reaching implications for understanding the knowledge sharing behavior within computer software and services companies in Karnataka, which may be applied to all organisations in India with a margin for cross-industry, cross regional and cross cultural variations.

Knowledge management policies and practices: Trends and status

Knowledge management was prominent among IT firms having their presence with relatively small workforce size of fewer than 200 employees. In the organisations involved, the most prominent functionaries in charge of knowledge management included the Senior General Manager and Chief Knowledge Officer. Knowledge management initiatives constituted a substantial part of the corporate strategy. Pressure for increased quality, innovation and productivity and the desire to earn and sustain competitive advantage have emerged as the major driving forces for implementing knowledge management initiatives. Customer service, competition and international operation were important knowledge domains in the organisations. Technical training and organisational culture serve as important organisational enablers in the computer and services industry. Collaboration in searching for knowledge is a major role and relevance of IT in knowledge management for better decisions in the organisation. The principal benefits of knowledge management initiatives, reported were improving work processes, improving customer service and proactive marketing, reducing response time, cycle time, lead time and faster delivery to market through more effective supply chain management, facilitating the sharing of best practice across vertical and horizontal organisational boundaries.

Organisations should measure and assess the business value of knowledge management by changing the mind-set of the people from ‘knowledge hoarding’ sentiment to a ‘knowledge sharing’ culture, linking knowledge management to business strategy and goals, gearing up technical infrastructure with more budgetary allocations.

Knowledge sharing behaviour

1. Organizations must create a supportive environment for knowledge sharing before beginning knowledge sharing programmes. Organizations should create and develop cultural norms, practises, and processes that promote knowledge workers' social interaction, cooperation, and mutual trust.
2. Management should demonstrate that it supports the sharing of knowledge. Knowledge sharing behaviours are encouraged by a favourable organisational climate and increased management commitment to it.
3. The study's findings indicate that knowledge workers' attitudes on sharing knowledge have an impact on their intentions and behaviours. By managing the aspects that influence knowledge workers' attitudes toward sharing knowledge, organisations can encourage these behaviours. Organizations should design knowledge sharing programmes such that they support knowledge workers' social concerns about things like obtaining reciprocal benefits, improving their reputation, appreciating helping others, maintaining a balanced power balance, and so forth.
4. Techniques should be developed to enhance the knowledge worker's view of their status within the organization. Organizations should recognise knowledge workers' contributions and promote their reputations. Knowledge workers are likely motivated in knowledge sharing process by the desire to build their reputation and recognition.
5. The concerns of knowledge workers about losing power within in the organisations should be addressed by organisations. Reassuring knowledge workers of their status, power, and position within the organisation can help to reduce their perceptions of the loss of knowledge power.
6. By promoting pro-social and organisational citizenship behaviours, organisations should encourage knowledge sharing behaviours. Organizations

should acknowledge that certain knowledge workers share valuable knowledge purely out of pro-social or altruistic motives.

7. Organizations must to reconsider financial incentives for knowledge sharing. Economic incentives only succeed in creating temporary compliance, as Kohn (1993) argues. They don't lead in enduring commitments. By promoting self-interested behaviour, they even weaken the inherent motivation of knowledge workers (Wasko and Faraj, 2000).
8. Knowledge sharing is time consuming. Organizations should ensure that knowledge workers have time, resources, and opportunities to engage in knowledge sharing behaviour.
9. To encourage teamwork and knowledge sharing, organisations should use knowledge management systems. The study's findings suggest that knowledge workers' perceptions about facilitating tools and technology have a significant role in their decision to participate in knowledge sharing practices.

DIRECTIONS FOR FUTURE RESEARCH

This study examined and reported on the broad trends in and status of knowledge management policies and practices in computer software and services companies in Karnataka. Further, by employing the modified Theory of Planned Behaviour model, an attempt was also made to find out key determinants, moderators, and the impact of dominant factors on the knowledge sharing intention and the actual knowledge sharing behaviour reported by the employees working for selected computer software and services companies.

As such, this research study is also not free from certain inherent limitations normally encountered by similar empirical studies. In the fitness of things, these limitations can be viewed as further opportunities for future research, as indicated below:

1. Future studies could incorporate more components into the research model to examine their effects on knowledge sharing behaviours, including self-efficacy, personality traits, leadership styles, trust, organisational commitment, perceived knowledge ownership, task interdependence, etc.
2. To triangulate the study's findings, future research should use elaborate measures and multiple methodologies.

3. To make the findings and conclusions more reliable, future studies should explore the research model utilising objective measures for knowledge sharing behaviours.
4. Research should verify the study's findings using larger samples and various contexts.
5. Longitudinal data will certainly be important for future studies. The findings would be more reliable if they were subject to an extensive analysis of various aspects of knowledge sharing behaviour.
6. The majority of earlier studies in the field of knowledge management were conducted in Western and European nations. Future studies should concentrate on cross-national studies in order to represent cultural differences in how knowledge management is viewed and its function in the corporate sector.

CONCLUSION

There appears to be relative neglect of leveraging the human resource knowledge domain for successfully managing KM initiatives by most of the companies. It needs to be appreciated that KM is not just technology-driven, but more importantly, it is culture-specific, context-specific, and people-driven. It should be noted that rather than the amount of investment in the KM system and efforts, it is the quality and appropriateness of these initiatives, the supportiveness of the work environment, and the use of appropriate KM policies and practices that determine how well KM contributes to continuous learning, development and business value. Evaluation of the economic and non-economic benefits and the investments associated with KM initiatives is absolutely critical to determining how KM practices corporate performance. Finally, the primary responsibility of management and focus of management practices (e.g., organisation's culture, strategy, structure, information technology, reward and recognition system, staffing, and leadership) should be to create and foster a climate that promotes knowledge creation, development, sharing, dissemination and application throughout the organisation

The primary enabler of knowledge management has been identified as knowledge sharing. Organizations are using knowledge management systems to make the most of knowledge resources and to encourage knowledge sharing. Though knowledge management systems are crucial, actual applications have demonstrated that just

having technology available does not ensure that knowledge will be shared. Academicians and practitioners have urged for the identification of characteristics that encourage or discourage knowledge sharing behaviours in the organisational context, citing the increasing importance of knowledge sharing to the success of knowledge management and to the survival of organisations.

By examining the variables that affect knowledge workers' knowledge sharing behaviours, this research study aimed to fill a gap in the body of existing knowledge. This research developed an integrated theoretical model and revealed three sets of crucial factors: psychological, organisational, and technological, which are thought to affect knowledge sharing behaviours. The research drew from multiple research streams, including social psychology, organisational learning, knowledge management, and information systems. By illuminating the factors influencing knowledge workers' knowledge sharing behaviour, the study's findings add to existing knowledge sharing research. Our collective grasp of the underlying psychological mechanisms that motivate knowledge sharing behaviours is deepened by the research model. The study's findings not only advance theory but also provide practical advice.

Knowledge is a strategic asset for organisations, and it has been demonstrated that a successful knowledge management programme may provide businesses an edge over their competitors (Afacan et al., 2015). By adhering to knowledge management best practises, an organisation can view knowledge management as a living, growing entity that expands and develops with time, utilise change management as a part of the knowledge management process, and use performance benchmarks tied directly to the organization's knowledge management process to improve programmed success (Ardichvili & Yoon, 2009). Instead of relying on centralised corporate staff, an organisation can leverage human capital, create user-friendly knowledge management systems, create effective knowledge management policies, and empower local offices to implement the most effective knowledge management strategies by identifying, implementing, and using the right knowledge management tools (Youngson & Choi, 2005).

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